

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A computer-readable medium having computer-executable components for updating modules of information via a communications channel interconnecting a plurality of computers, wherein each module of information includes a plurality of module blocks of information, the computer-readable medium having computer-executable components comprising:

(a) a comparison component for comparing an out-of-date module of information stored in memory of a first computer to an updated module of information stored in memory of a second computer to identify which module blocks in the updated module of information contain more recent information;

(b) a download component for downloading from the second computer to the first computer, only the module blocks of the updated module containing more recent information that were identified by the comparison component; and

(c) an update component for replacing corresponding module blocks in the out-of-date module with the module blocks of the updated module containing more recent information that were downloaded by the download component.

2. The computer-readable medium of Claim 1, wherein the comparison component identifies which module blocks in the updated module of information contain more recent information by comparing each module block of the updated module of information to each module block of the out-of-date module of information.

3. The computer-readable medium of Claim 1, wherein the comparison component identifies at least one new module block within the updated module of information that does not correspond to a module block in the out-of-date module, the download component downloads from the second computer to the first computer via the communication channel the at least one

new module block of information identified by the comparison component, and the update component updates the out-of-date module with the at least one new module block downloaded by the download component.

9/4. A method for updating modules of information via a common communications channel interconnecting a plurality of computers, the method comprising:

(a) identifying a first module containing information to be updated, wherein the first module is stored in memory of a first computer, and wherein the first module comprises a plurality of first module blocks;

(b) identifying a second module containing more recent information than the first module, wherein the second module is stored in memory of a second computer, and wherein the second module comprises a plurality of second module blocks;

(c) identifying which second module blocks contain more recent information than the first module blocks;

(d) downloading via the common communications channel the identified second module blocks from memory of the second computer to the first computer; and

(e) updating the first module stored in memory of the first computer with the more recent information contained in the identified second module blocks downloaded from memory of the second computer.

10/5. The method of Claim 4, further comprising repeating (b) through (e) of Claim 4 for each of a plurality of modules identified as containing information to be updated.

11/6. The method of Claim 4, wherein identifying the second module containing more recent information than the first module comprises comparing the first module to the second module to determine if the second module contains more recent information than the first module.

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7. The method of Claim 6, wherein identifying which second module blocks contain more recent information than the first module blocks comprises comparing each second module block to each first module block to determine if the second module block has more recent information than the first module block.

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8. The method of Claim 4, wherein updating the first module stored in memory of the first computer comprises updating each of the first module blocks with the more recent information contained in each of the identified second module blocks downloaded from memory of the second computer.

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9. The method of Claim 4, further comprising:

- (a) identifying an nth module containing more recent information than the first module, wherein the nth module is stored in memory of an nth computer and wherein the nth module comprises a plurality of nth module blocks;
- (b) identifying which nth module blocks contain more recent information than the first module blocks;
- (c) downloading via the common communication channel the identified nth module blocks from memory of the nth computer to the first computer; and
- (d) updating the first module stored in memory of the first computer with the more recent information contained in the identified nth module blocks downloaded from memory of the nth computer.

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10. The method of Claim 9, wherein at least one of the first module, the second module and the nth module comprises a module of information nested within another module of information.

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11. The method of Claim 4, further comprising:

(a) identifying an nth module containing new information, wherein the nth module is stored in memory of an nth computer, and wherein the nth module comprises a plurality of nth module blocks;

(b) identifying which nth module blocks contain new information;

(c) downloading via the common communication channel the identified nth module blocks from memory of the nth computer to the first computer; and

(d) updating the first module stored in memory of the first computer with the new information contained in the identified nth module blocks downloaded from memory of the nth computer.

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12. A method of updating outdated information stored in memory of a first peer computer with more recent information stored in memory of a second peer computer, wherein the first peer computer and the second peer computer are interconnected via a common communications link, the method comprising:

(a) comparing a module of outdated information stored in memory of the first peer computer to a module of more recent information stored in memory of the second peer computer, wherein the module of outdated information includes a plurality of module blocks at least one of which contains outdated information, and wherein the module of updated information includes a plurality of module blocks at least one of which contains updated information and corresponds to the at least one module block of outdated information;

(b) downloading via the network the at least one module block of updated information from the first peer computer to the second peer computer; and

(c) replacing the at least one module block containing outdated information with the at least one module block containing updated information which was downloaded via the common communications link.

Sub 13
13. The method of Claim 12, wherein comparing the module of outdated information stored in memory of the first peer computer to the module of more recent information stored in

memory of the second peer computer comprises comparing each module block of outdated information to a corresponding module block of updated information to identify the at least one module block containing updated information.

14. The method of Claim 13, wherein comparing each module block of outdated information to a corresponding module block of updated information identifies a plurality of module blocks in the updated module containing updated information, wherein the plurality of module blocks containing updated information are downloaded via the network from the first peer computer to the second computer, and wherein the module blocks containing outdated information are replaced with the plurality of module blocks containing updated information.

15. A method for updating information stored in memory of a subscribing computer connected to a publishing computer via a network, the method comprising:

- (a) subscribing to published information stored in memory of the publishing computer;
- (b) comparing the information stored in memory of the subscribing computer to the published information stored in memory of the publishing computer;
- (c) responsive to the published information stored in memory of the publishing computer having been changed from the information stored in memory of the subscribing computer, identifying which published information stored in memory of the publishing computer has been changed;
- (d) downloading from the publishing computer to the subscribing computer via the network only that published information which has changed from the information stored in the memory of the subscribing computer; and
- (e) updating the information stored in memory of the subscribing computer only with that published information which has changed and has been downloaded from the publishing computer.

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16. A method of updating a plurality of user modules of information via a network, interconnecting a host computer and a user computer, the user computer having a user memory for storing user modules, each user module including a plurality of user module blocks, the host computer having a host memory for storing host modules, each host module including a plurality of module blocks, the method comprising:

(a) identifying a first user module stored in user memory, wherein at least one first user module block of the first user module comprises a second user module of information;

(b) identifying a first host module stored in host memory that corresponds to the first user module, wherein each first host module block corresponds to a first user module block, wherein at least one first host module block comprises a second host module of information, and wherein the second host module corresponds to the second user module;

(c) comparing the first host module to the first user module to determine if the first host module contains more recent information,

(d) if the first host module contains more recent information, comparing each first host module block to the corresponding first user module block to determine if the first host module block contains more recent information than the corresponding first user module block;

(e) if the first host module block comprises a second host module of information, comparing each second host module block to the corresponding second user module block to determine if the second host module block contains more recent information than the corresponding second user module block;

(f) downloading via the network, each host module block containing more recent information into user memory; and

(g) updating each corresponding user module block with the corresponding downloaded host module block.

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